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The Effects of Intimate Relationship Education on University Students' Attachment

Security

by

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The University of Montana

Presented in partial fulfillment of the requirements
for the degree of
Doctorate of Education
in Counselor Education and Supervision

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CHAPTER ONE

INTRODUCTION TO THE STUDY

Establishing and maintaining a long-term romantic relationship is a central social process for many adults. The success or failure of this endeavor can significantly impact happiness and wellbeing (Holmes & Johnson, 2009). Several studies suggest that supportive stable romantic relationships are associated with higher wages and gratification in many domains of life (Dush & Amato, 2005). Similarly, happily married individuals are physically and emotionally healthier than those who are not (Koball, Moiduddin, Henderson, Goesling, 2010).

Approximately, 90% of Americans will marry at some point during their lives (Popenoe & Whitehead, 2002). Yet, nearly one half of all marriages in the United States end in divorce and many individuals who remain married report experiencing frequent marital conflict and misery (Conger, Cui, Bryant, & Elder, 2000; Kreider & Ellis, 2011). Divorce and marital discord can have negative emotional and physical impacts on both partners, with depression being the most common symptom of relationship distress (Bradbury, Fincham & Beach, 2000; Gotlib & McCabe, 1990).

Adult attachment has been linked to the formation, satisfaction, and maintenance of romantic relationships (Cozzarelli, Hoesktra, & Bylsma, 2000; Hazan & Shaver, 1994; Mikulincer, Florian, Cowan, & Cowan, 2002; Senchak & Leonard, 1992). Attachment systems influence people's beliefs and expectations about themselves and significant others. Consequently, a person's developed attachment pattern has a direct impact on

how s/he might respond to relationship stress (Pietromonaco, Greenwood, & Barrett, 2004).

Adults with secure attachment feel comfortable with closeness and interdependence in relationships. Similarly, they believe they are worthy of love and see others as trustworthy and dependable. In contrast, adults with insecure attachment tend to struggle more in close relationships. For instance, individuals with avoidant attachment characteristics feel uncomfortable with intimacy and interdependence and people with anxious attachment characteristics often feel unworthy of love and consequently find it difficult to depend upon and trust romantic partners (Collins & Read, 1994). There is extensive literature documenting the ways attachment influences how people think about, behave, and feel in their intimate relationships (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987; Rowe & Carnelley, 2003).

Several studies involving both dating and married couples provide substantial evidence for a connection between attachment security and relationship satisfaction (Collins & Feeney, 2000; Collins & Read, 1990; Feeney & Noller 1990; Hazan & Shaver, 1987; Peterson & Park, 2007). For example, individuals who are securely attached are more likely than insecurely attached individuals to: (a) feel content in their romantic relationships, (b) report high levels of intimacy, commitment, and emotional involvement, (c) be able to communicate effectively with their partners, (d) handle interpersonal conflict constructively, and (e) provide sensitive caregiving to their partners (Campbell, Simpson, Boldry, & Kashy, 2005; Crespo, Davide, Costa, & Fletcher, 2008; Hazan & Shaver, 1994; Mikulincer, Florian, Cowan, & Cowan 2002;). Subsequently,

individuals classified with a secure attachment status tend to show more self-confidence and less fear regarding marital relationships (Feeney & Noller, 1990).

Given the benefits of happy committed relationships and the risk factors associated with relationship discord and divorce, improving chances of marital success through educational efforts is a worthwhile goal (Nielsen, Pinsof, Rampage, Solomon, & Goldstein, 2004). In a random survey of couples across the United States, approximately 31 percent of couples in ongoing marriages sought premarital counseling (Stanley et al, 2006). Couples who seek premarital counseling tend to be at lower risk for subsequent marital discord and divorce. Nevertheless, couples seek marital interventions at low rates, with just 19 to 37 percent of couples in the United States seeking marital counseling before getting divorced (Doss, 2009). Due to the current limited scope of marital interventions, it seems imperative that efforts are made to expand the reach of relationship education and enrichment opportunities.

Premarital education generally involves didactic efforts to strengthen supportive factors and modify risk factors for couples anticipating marriage (Childs & Duncan, 2012; Stanley & Rhoades, 2009). According to Larson (2004), one goal of marriage and relationship education is to provide “upstream” educational interventions to individuals in an effort to reach people before relationship struggles become too serious and entrenched. Premarital education is designed to prevent the onset of future problems and has been shown to increase productive communication and relationship satisfaction (Carrol & Doherty, 2003). Additionally, it has been shown to decrease the likelihood of divorce subsequent the intervention (Markman, Stanley, Blumberg, 1996).

The years between ages 18 and 25, now commonly referred to as emerging adulthood (Arnett, 2000), represent a crucial developmental period that involves experimentation and introspection. Cui, Fincham, and Durtschi (2010) suggest that establishing stable romantic relationships is one of the major developmental tasks of emerging adulthood. Although emerging adults frequently receive relationship advice from friends and family, these sources often do not reflect best practices that experts would recommend. Consequently, these young adults seldom receive accurate information regarding the composition of a healthy romantic relationship.

Relationship education that assists students in becoming more aware of their thoughts, beliefs, and feelings about their selves and important others, may positively impact their attachment security and in turn, improve their romantic relationships. Despite extensive research on adult romantic attachment, there has been minimal empirical research regarding whether relationship education can affect a person's attachment security.

Statement of Problem

The existence, quality, and stability of an intimate relationship, particularly marriage, strongly affect a person's health and wellbeing (Knoke, Burau, Roehrle, 2010). Yet, in the United States, nearly half of marriages end in divorce and fewer people are choosing to marry at all (Taylor, 2010; Tejada-Vera & Sutton, 2010). For several decades, a variety of interventions have been utilized in an effort to improve the likelihood that individuals will attain a stable and satisfying marriage. Historically, these interventions have taken place when individuals are already partnered and challenging relationship dynamics are already established. More recently, however, many

relationship experts have established a more proactive approach to prevent marital decline. One such effort involves targeting emerging adults with relationship education, no matter their current relationship status (Pearson, 2004; Rhoades & Stanley, 2011). Several studies have identified a connection between attachment style and romantic relationship quality (Collins & Read, 1994; Feeney & Noller 1990; Hazan & Shaver, 1989). Individuals who are relatively secure tend to be involved in more satisfying, enduring, and less conflict ridden relationships than insecure individuals. In contrast, insecure individuals are more likely than secure individuals to experience a breakup in their relationship (Feeney & Noller, 1990). Yet to date, there has been a lack of research regarding whether relationship education can positively impact individuals' attachment security.

Purpose of the Study

Several attachment theorists suggest that attachment security can change over the lifespan (Ainsworth, Blehar, Waters & Wall, 1978; Bowlby, 1980; Fraley & Shaver, 2000). Thompson (2000) particularly emphasizes that change is more possible during times of developmental transition. Developmental theories postulate distinct periods in life during which an individual's personal identity is most open to self-evaluation and modification (Arnett, 2000). Due to the experimental and exploratory nature of emerging adulthood, it is likely that this time period is particularly primed for attachment change.

This study adds research to both the relationship education and attachment fields by evaluating whether or not students' attachment security is impacted by a semester long undergraduate course on intimate relationships. Utilizing data collected in an experimental and control group over two semesters at the University of Montana, this

descriptive and quasi-experimental study compares experimental and control group responses to the Experiences in Close Relationships Revised Scale (ECR-R) at the beginning and end of the semester. The experimental group consisted of students enrolled in the Intimate Relationships course while the control group was comprised of students enrolled in Introduction to Interpersonal Communication.

Research Questions and Hypotheses

Research Question 1:

Does completion of a semester-long intimate relationships course affect students' attachment-related anxiety and attachment-related avoidance?

Hypothesis 1A:

Students enrolled in the Intimate Relations class (experimental group) will show a significant decrease in attachment-related anxiety as measured by the ECR-R, as compared to students in the Introduction to Interpersonal Communication (control group).

Null Hypothesis:

There will not be a significant difference in attachment-related anxiety as measured by the (ECR-R) between students in the Intimate Relations class (experimental group) and students in the Introduction to Interpersonal Communication (control group).

Hypothesis 1B:

Students enrolled in the Intimate Relations class (experimental group) will show a significant decrease in attachment-related avoidance as measured by the ECR-R, as compared to students in the Introduction to Interpersonal Communication (control group).

Null Hypothesis:

There will not be a significant difference in attachment-related avoidance as measured by the (ECR-R) between students in the Intimate Relations class (experimental group) and students in the Introduction to Interpersonal Communication (control group).

Research Question 2:

How do demographic variables affect student responses on the Experience in Close Relationships scale (ECR-R)?

Hypothesis 2:

Participant demographic variables, such as gender, ethnicity, current relationship status, and parental divorce, will affect attachment security as measured by the ECR-R.

Null Hypothesis:

Participant demographics, such as gender, ethnicity, current relationship status and parental divorce, will not impact attachment security as measured by ECR-R.

Research Question 3:

Will students in the experimental group who participate in a counseling lab option demonstrate a greater decrease in their attachment related anxiety and avoidance as measured by the ECR-R than students who chose a non-counseling lab option?

Hypothesis 3A:

There will be a significant difference in attachment-related anxiety as measured by the (ECR-R) between students who participate in a counseling lab option and those who do not.

Null Hypothesis:

There will not be a significant difference in attachment-related anxiety as measured by the (ECR-R) between students who participate in a counseling lab option and those who do not.

Hypothesis 3B:

There will be a significant difference in attachment-related avoidance as measured by the (ECR-R) between students who participate in a counseling lab option and those who do not.

Null Hypothesis:

There will not be a significant difference in attachment-related avoidance as measured by the (ECR-R) between students who participate in a counseling lab option and those who do not.

CHAPTER TWO

LITERATURE REVIEW

This chapter includes a brief review of the relevant attachment literature. This literature is organized into sections that focus on development of the theory, adult romantic attachment, adult attachment measures, the continuity of attachment security across the lifespan, and attachment security modification. Afterwards, a short history of relationship education is provided, highlighting why emerging adults can particularly benefit from relationship education. Lastly, there is a concise review of three relationship education initiatives targeted at emerging adults.

Attachment Theory

Attachment theory was originally developed by John Bowlby, a British psychoanalyst, in the 1940's. His work began with an effort to understand the intense distress experienced by infants when they were separated from their caregivers. The theory is based on evolutionary principles and asserts that human survival depends on the ability of infants to form and maintain intimate attachments with caregivers. Bowlby posited that attachment processes constituted a behavioral system, which is a biologically based system of interpersonal actions that are intended to increase an individual's sense of safety, particularly in times of distress.

The attachment behavioral system consists of four components: proximity maintenance, safe haven, secure base, and separation distress (Bowlby, 1969; Bowlby, 1973). Proximity maintenance is described as the infant's desire to remain close to his or her caregiver. Attachment behaviors that demonstrate proximity maintenance include crying, smiling, sucking, clinging, and following (Bowlby, 1958). These behaviors most

typically occur when the infant is faced with a need, stressor, danger, or new situation. During threatening and dangerous events, infants can rely on the trustworthy and available caregiver to act as their “safe haven” in order to comfort and protect them (Bowlby, 1969). When infants are assured that their safe haven exists, they are then able to perceive the attachment figure as a “secure base” from which they can explore the world independently.

Bowlby (1969) theorized that early interactions with attachment figures were encoded in mental representations that he called internal working models of self and others. These beliefs, both conscious and unconscious, are understood as personal theories about behavior in interpersonal relationships (Sperling & Lyons, 1995). Attachment theorists believe that internal working models are formed from actual relationship experiences and impact future attachment behaviors (Ainsworth, Blehar, Waters & Wall, 1978; Bowlby, 1979). This is the main distinction between attachment theory and traditional psychoanalytic theory, as Bowlby believed that actual relationship experiences created repetitive internal working models, while Freud contended that it was the fantasized relationship dynamics that primarily contributed to the development of specific internal working models.

Bowlby posited that internal working models of self and others are complementary. In other words, as an infant becomes confident in the caregiver’s capacity to provide regulatory assistance, s/he also develops confidence in his or her own capacity for regulation (Sroufe, 2005). According to attachment theory, people develop distinct attachment styles based on their perception of the availability and responsiveness

of their primary caregivers during childhood. Furthermore, attachment theory promotes the notion that relationships are the primary foundation for the psyche and wellbeing.

The Strange Situation

Mary Ainsworth, another pioneer in the field of attachment theory, developed an experimental procedure called the strange situation. The strange situation was used to assess attachment patterns of infants (Ainsworth et al, 1978). Within a laboratory setting, Ainsworth observed the attachment behaviors of 12 to 20 month olds in eight separate situations over the course of a twenty-minute time period. Through observing an infant's responses to very brief separations from, and reunions with a given parent, Ainsworth classified the organization of the infant's attachment to that parent as secure, avoidant, or ambivalent (Ainsworth et al, 1978; Main, 2000).

Adult Romantic Attachment

Bowlby (1979) speculated that attachment patterns persisted throughout the lifespan as evidenced by his assertion that attachment plays a "vital role from cradle to grave," (p.129). Nevertheless, his focus remained on the infant caregiver relationship and adult attachment theory did not come to the forefront until the mid 1980s. Hazan and Shaver (1987) were the first researchers to conceptualize romantic love as an attachment process.

Adult attachment is explained as the propensity for adults to make concerted efforts to establish and maintain closeness with a significant other who can provide them with physical and emotional security. More specifically, Hazan and Shaver (1987) drew four parallels between infant and romantic attachment. The researchers explain that in both kinds of relationships people feel safe and secure when the person is present.

Individuals turn to the person in times of distress, sickness, and fear. Moreover, they use this person as a “secure base” from which to explore the environment. They also tend to speak to one another in a unique language often termed ‘motherese’ or ‘baby talk.’

Additionally, the way infants respond to separations from their caregivers is very similar to how adults react to separations and break-ups from their romantic partners (Fraley, 2002). In contrast with an infant’s attachment with his caregiver, however, adult romantic attachment is reciprocal. In other words, adult romantic attachment is a bidirectional process in which both members of the dyad provide and receive care.

Descriptions of Adult Attachment

There are a variety of ways to classify adult romantic attachment patterns but generally adult attachment falls into secure and insecure styles of relating.

Bartholomew’s Four Category Model has been particularly influential in adult attachment literature. According to this model, adults classified as secure hold a positive view of self and others and feel comfortable with both intimacy and autonomy. Research has reliably demonstrated that individuals who are relatively secure tend to be involved in more fulfilling, enduring, and less conflict ridden relationships than insecure individuals (Brennan & Shaver, 1995; Feeney, 1994; Simpson & Rholes 1994).

In contrast, insecure adults report less available support, less satisfaction with the support they receive, and a larger gap between what they say they need and what they say they receive (Feeney, 1996). Similarly, insecure attachment has been associated with reduced trust of others, reduced self-knowledge, and increased emotional distress (Pietromonaco, Greenwood & Barrett, 2004). Not surprisingly, insecure individuals are

more likely than secure individuals to experience a breakup in their relationship (Feeney & Noller, 1990).

Continuing with Bartholomew's model, people who have a negative view of themselves and a positive view of others are classified as preoccupied. Hazan and Shaver (1987) suggest these individuals often yearn for a relationship but fear that others are not interested in them. Moreover, the authors report that preoccupied individuals tend to self-disclose inappropriately and look to relationships to fulfill dependency needs (Guerrero, 1996).

Individuals who possess a positive view of the self and a negative view of others are classified as dismissing. People in this category tend to feel uncomfortable with intimacy and attempt to protect themselves against disappointment by avoiding close relationships and maintaining a sense of independence. Bartholomew (1990) described people in this category as "compulsively self-reliant."

Finally, individuals classified as fearful-avoidant tend to have a negative view of both self and others (Bartholomew 1990; Guerrero, 1996). People in this category tend to view themselves as unlovable and see others as rejecting. They often desire external validation but distrust others (Bartholomew, 1990) (See Figure 1).

Figure 1: Four Category Model of Attachment

		MODEL OF SELF (Dependence)	
		Positive (Low)	Negative (High)
MODEL OF OTHER (Avoidance)	Positive (Low)	SECURE Comfortable with intimacy and autonomy	PREOCCUPIED Preoccupied with relationships
	Negative (High)	DISMISSING Dismissing of intimacy Counter-dependent	FEARFUL Fearful of intimacy Socially avoidant

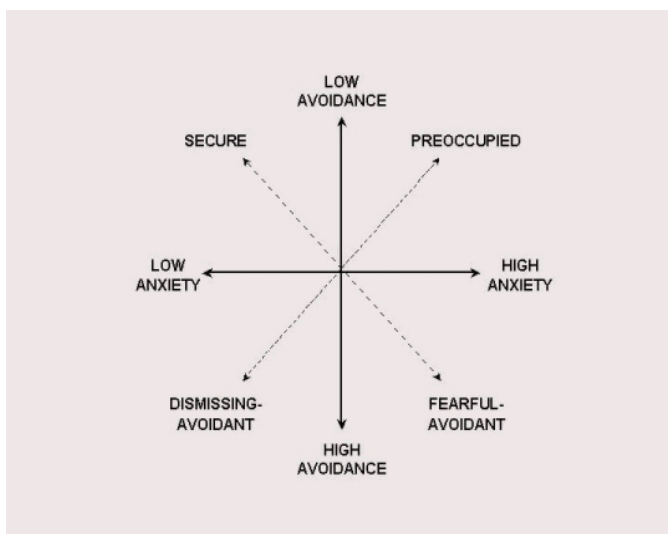
Adult Attachment Styles Measures

Ainsworth's recognition and coding of attachment patterns influenced the development of many subsequent attachment instruments. Although there are a variety of approaches to measuring and classifying adult attachment styles, instruments tend to distinguish between patterns of secure attachment and subtypes of insecure attachment (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010). Adult attachment measures tend to fall into two broad categories: coding of observed data and self-report measures.

Self-report measures examine conscious attitudes towards relationships, typically focusing on views that individuals currently hold about themselves and others in close relationships. More specifically, self-report measures directly assess individuals' experience with separation, loss, intimacy, dependence, and trust (Brennan, Clark, & Shaver, 1998). Some critics of these measures deem them too blunt. They argue that attachment phenomenon is nuanced and needs to be activated in order for attachment behaviors to be truly manifested. Furthermore, proponents of coding observed data via interview argue that capturing the non-conscious aspects of attachment is far more revealing (Bartholomew & Shaver, 1998; Sochos, 2013).

Methods of assessing adult attachment can also be divided based on whether attachment patterns are understood as categories or dimensions. Categorical attachment measures are thought to be more global and participants fall into discrete categories. These measures of attachment are frequently criticized for being simplistic and downplaying the differences amongst individuals who fall within a category (Fraley, Waller, & Brennan 2000). Given that categorical measures are less nuanced than dimensional measures, they tend to have limited statistical power compared to dimensional measures (Ravitz et al, 2010). Dimensional attachment models involve two aspects of insecurity: attachment anxiety and attachment avoidance. Dimensional models display more variation and perhaps better represent individual differences. Most attachment researchers currently conceptualize and measure attachment dimensionally rather than categorically, believing that attachment is best understood on a continuum (Fraley & Shaver, 2000; Fraley, Vicary, Brumbaugh & Roisman 2011; Sochos, 2013) (See Figure 2).

Figure 2: Attachment Continuum Graph



Adult Attachment Interview

The Adult Attachment Interview (AAI) was the first measure of adult attachment and for many years was the most influential method of assessing adult attachment. It has demonstrated strong validity and reliability in both clinical and non-clinical populations (Ravitz et al, 2010; van IJzendoorn, 1995). The AAI is an hour long semi-structured clinical interview designed to elicit thoughts, feelings, and memories related to early experiences with primary caregivers. There are three primary organized categories of adult attachment in the AAI: autonomous, dismissing, and preoccupied. The three categories represent continuations of the categories in Ainsworth's Strange Situation: secure, avoidant, and anxious. This measure primarily focuses on an adult's childhood relationship with his or her parents and assesses an individual's current state of mind with respect to attachment (Hesse, 2008). In other words, it examines an individual's capacity to verbalize and explore attachment experiences (Sochos, 2013)

The Tripartite Model of Romantic Attachment (Attachment Style Measure)

In their landmark study, Hazan and Shaver (1987) utilized infant attachment theory as a framework to examine how adult love relationships are related to early infant caregiver relationships (Collins & Read, 1990). The researchers developed three vignettes that were analogous to Ainsworth's attachment classifications (secure, avoidant, and anxious) and asked participants to indicate which vignette best characterized the way they think, feel, and behave in close relationships (Fraley, 2002). Hazan and Shaver (1987) discovered that the distribution of the three patterns was similar to what Ainsworth observed in the Strange Situation. Approximately 60% of adults identified as secure, 20% as avoidant, and 20% as anxious.

The Four-Category model of Attachment Styles

Bartholomew (1990) argued that the three-category model of attachment was too limiting and thus created the four-category model of attachment based on mental models of self and others. Consequently, Bartholomew and Horowitz (1991) designed a self-report questionnaire called the Relationship Questionnaire (RQ) based on the four-category model of adult attachment. The RQ consists of four paragraphs describing each of the attachment prototypes- secure, preoccupied, dismissing, and fearful. Participants rate how well each paragraph corresponds to their general (not romantic) relationship pattern, where 1= not at all like me and 7= very much like me (Bartholomew & Horowitz, 1991; Davila & Cobb, 2003).

Experience in Close Relationships-Revised (ECR-R)

The Experience in Close Relationships-Revised (Fraley, Waller, & Brennan, 2002) is a revised version of Brennan, Clark, and Shaver's (1998) Experience in Close Relationships (ECR). The ECR-R was developed through pooling over 300 items obtained from existing attachment measures and subjecting them to item response theory. The ECR-R measures two dimensions of attachment Anxiety and Avoidance, with each subscale containing 18 items. The anxiety dimension refers to one's sense of self-worth and acceptance (vs. rejection) by others, and the avoidance dimension refers to the degree to which one approaches (vs. avoids) intimacy and interdependence with others (Bartholomew & Horowitz, 1991; Sochos, 2013;). An example of an item from the Anxiety subscale is "I worry that romantic partners won't care for me as much as I care for them." An example of an item from the Avoidance subscale is "I prefer not to show a partner how I feel deep down." Each item is rated on a 7-point Likert scale (1 = disagree

strongly, 2 = disagree somewhat, 3 = disagree slightly, 4 = neutral/mixed, 5 = agree slightly, 6 = agree somewhat, 7 = agree strongly) (Fraley et al, 2002).

The ECR-R is likely the most popular measure of adult attachment style due to its brevity, comprehensiveness, and reliability (Sochos, 2013). In a recently published meta-analysis of the reliability of the most commonly used self-report attachment measures, the ECR-R had the highest average reliability (Graham & Unterschute, 2014). Because of its strong psychometric properties and ease of use, the ECR-R was the attachment measure utilized for this research project.

The Stability of Attachment Security Across the Lifespan

There is little doubt that early relationships between caregivers and their children have an enduring impact on how an individual navigates interpersonal relationships (Waters, Weinfield, & Hamilton, 2000). Although attachment style was once thought to be generally stable over time, Bowlby (1973) indicated that internal working models both accommodate and assimilate information. In other words, attachment in adulthood remains influenced by both early attachment history and current contextual factors.

Internal working models of self and others act as a relational heuristic, guiding individuals' expectations in interpersonal relationships. These working models, based on repeated interactional patterns, are generally understood to determine a person's global attachment style. A person's global attachment, falls into a category of secure or insecure and is based on the attachment behaviors that a person tends to habitually and often unconsciously activate (Carnalley & Rowe, 2003).

In addition to a global attachment style, adults can also have relationship specific attachment styles (Carnalley & Rowe, 2003). Wachtel (2010) highlights that attachment

behaviors occur between two people suggesting attachment is a dyadic concept. In other words, patterns of attachment may differ fundamentally depending upon who is the focus of the attachment behaviors.

Although the notion that early attachment experiences impact attachment style in romantic relationships is relatively uncontroversial, questions remain regarding how much stability and security people feel with various attachment figures (ie mother, father, romantic partner) and how stable attachment security is within any one of these relationships over time (Cozzarelli, Hoekstra, Bylsma, 2000). Hazan and Shaver (1987) found that adults who were secure in their romantic relationships were more likely to recall their childhood relationships with caregivers as being affectionate and caring. More recently, however, Fraley (2002) collected self-report measures of one's current attachment style with a primary caregiver and a current romantic partner and found a small to moderate correlation between the two kinds of attachment relationships. These findings suggest that attachment is undoubtedly more pliable than initially thought.

Roisman, Padrón, Sroufe, and Egeland (2002) discuss the concept of earned-secure. The authors suggest that people can alter their attachment classification through affirming interpersonal relationships, particularly long-term romantic relationships. There is recent research indicating that people's attachment styles mutually shape one another in close relationships (Crowell, Treboux, & Waters, 2002). For instance, in a longitudinal study, Hudson, Fraley, Vicary, and Brumbaugh (2012) found that, if one person in a relationship experienced a change in attachment security, his or her partner was likely to experience a change in the same direction.

It is widely believed that attachment security can change over the lifespan but

little is known about how and when attachment modification occurs. Thompson (2000) hypothesized that attachment modification is more plausible during times of developmental transition. Developmental theories suggest that there are distinct periods in life during which an individual's personal identity is most open to self-evaluation and modification (Arnett, 2000). Due to the experimental and exploratory nature of emerging adulthood, it is possible that individuals within this developmental time period are particularly susceptible to attachment change.

Therapeutic Interventions with an Attachment Focus

Bowlby (1988) believed that attachment is dynamic and that a client's internal working model could be altered through the therapeutic relationship. In other words, a client's relationship with his or her therapist could function to provide a safe and secure environment in which s/he could explore the impact of early attachment experiences on past and present intra and interpersonal beliefs. Through the exploration of transference material in the therapeutic relationship, clients may begin to become aware of previously denied feelings related to attachment experiences (Wachtel, 2010; White, 2004).

Emotionally Focused Therapy (EFT) founder Sue Johnson developed her empirically validated intervention on the basis of adult attachment theory. She highlights the utility of the theory suggesting it provides therapists insights regarding the most salient aspects of relationships, guides them towards meaningful treatment goals, and appropriate interventions (Johnson, 2004).

The goals of EFT involve assisting clients in expanding constricted negative emotional responses that exacerbate negative interactional patterns, restructuring interactions so that both partners become more accessible and responsive to one another,

and fostering positive cycles of comfort, caring, and bonding (Johnson, 2005). EFT researchers have amassed evidence that couples in the intervention fare better than those in a control group. In four randomized control trials, EFT yielded recovery rates of 70-73% (Johnson 2007). EFT supports couples in strengthening their bond by creating a safer more secure relationship.

Hazan and Shaver (1994) suggest that a corrective emotional experience and a rise in one's reflective capacity are the two things that have been shown to move a person towards a more secure attachment. Currently, there is no known research evaluating whether educational interventions have a similar capacity as therapy to move participants towards attachment change.

Relationship Education

In the past few decades, promoting healthy intimate relationships and marriages has become an important focus of policymakers, clergy, and mental health professionals. Premarital education, in particular, has been receiving attention from legislators and has subsequently received considerable public funding (Hawkins, Blanchard, & Carroll, 2010). In 2006, federal legislation allocated \$500 million over 5 years to support promising marriage and relationship education programs. Moreover, several states have allocated additional funding to such efforts (Hawkins, Blanchard, Baldwin, & Fawcett, 2008). Participation in premarital education has been shown to increase relationship satisfaction, improve communication skills and decrease the likelihood of relationship dissolution (Hawkins et al, 2008; Stanley, Rhoades, & Markman, 2006).

Historically, the majority of relationship education programs have been targeted at engaged and married couples. Furthermore, these programs have seldom reached

couples with the highest risk factors for distress and divorce (Halford, Markman, Kling, & Stanley, 2003). Similarly, the majority of research on relationship education lacks economic diversity and until recently has been focused on white middle class couples (Hawkins & Ooms, 2012; Rhoades & Stanley, 2011). It is clear that relationship education could be further improved through diversifying its efforts (Dion, 2005; Markman & Rhoades, 2012).

One such effort involves aiming relationship education at emerging adults (Olmstead, Pasley, Meyer, Stanford, Fincham, & Delevi, 2011). Arnett (2000) proposed the theory of emerging adulthood in an effort to highlight the unique developmental characteristics of the age period involving the late teens through the mid-20s. He suggested that this developmental period is marked both by variability and exploration. Arnett (2007) further identified five features of emerging adulthood that make the period distinct stating: it is the age of identity exploration, the age of instability, the self-focused age, the age of feeling in-between, and the age of possibilities. He argues that most emerging adults do not settle into long-term adult roles but rather pursue a variety of experiences in an effort to gradually make their way toward enduring choices in love and work (Arnett, 2007). Ooms and Wilson (2004) indicated that emerging adults are in a developmental period that represents a “reachable moment.” In other words, they are in a unique position to learn, reflect, and practice relationship skills. Consequently, there is a compelling rationale to focus relationship education efforts on this population (Fincham, Stanley, & Rhoades 2011).

Given that much of the focus on relationship education centers on the importance of healthy relationships for personal wellbeing, it is possible that relationship education

will enhance participants' reflective capacity (ability to reflect upon one's own experiences and those of others) in much the way that therapy tends to. Bowlby (1988) suggested that insight and self-awareness provide the foundation for attachment modification. Through its pervasive focus on relational issues, it is likely that relationship education can give rise to emerging adults' reflective capacity and even increase attachment security.

Relationship Education Programs for Emerging Adults

Marriage 101:

Marriage 101: Building Loving and Lasting Partnerships is a for-credit course that has been offered to undergraduate students at Northwestern University since 2001 (Nielson et al, 2004). The authors describe the course as both academic and experiential, with course content updated in unison with the latest scientific research on relationship education. The course typically emphasizes the following information: (a) Love is not enough (b) personal maturity and self-understanding (c) capacity to assess compatibility with prospective partners (d) intimacy and personal barriers to achieving it (e) sexual satisfaction and compatibility (f) conflict resolution and communication skills (g) specific problems that can undermine marriages (Nielson et al, 2004).

The quarter long course involves bi-weekly 75-minute class meetings involving lectures, video-clips, and experiential activities. The course is followed by "breakout sessions" which are facilitated by trained leaders. The breakout groups consist of approximately 8 students and allow classmates an opportunity to engage with the material on a more personal level. Students are encouraged to be self-reflective and share intimate experiences (Nielson et al, 2004).

Marriage 101 relied on both informal and formal methods of assessment. Students were assigned to analyze three vignettes, each describing a couple and an interaction between them at the onset and end of the course. The professors noted that there was not as much difference on pre-test and post-test scores as they had anticipated. Nevertheless, the group leaders reported observing student growth as evidenced by empathic listening and comfort level with a variety of emotions. Furthermore, students reported feeling consistently satisfied with course content with 88% of students rating the course a 5 or 6 with 1 being the lowest and 6 being the highest level of satisfaction. Nielson stated, “We have become one of the most popular courses at Northwestern and fill up on the first day of registration every year” (personal communication, 2014).

Project RELATE.

Project RELATE, an undergraduate relationship education course at Florida State University (FSU), is designed to strengthen and support marriage by providing young adults with the necessary skills and knowledge to make informed decisions about healthy relationships (Fincham, Stanley, & Rhoades, in Fincham & Cui, 2011). This course is the largest known university relationship education program and is offered to 1,000 students each semester. The program aims to reach approximately 25% of FSU’s population and assess its impact on campus social norms.

Project RELATE addresses the importance of family background, self-awareness, communication skills, intentionality regarding relationship decisions, mate selection, relationship expectations, gender roles, and conflict management. The creators of Project RELATE indicated the evaluation process is the most difficult aspect of program delivery (Stanley & Rhoades, 2009). Nevertheless, preliminary evaluation findings are positive.

Researchers utilized both existing instruments as well as created their own constructs. Compared to a control group, students who completed Project RELATE were better able to identify the warning signs of an unhealthy relationship, demonstrated increased intentionality regarding relationship decisions, and were less likely to engage in sexual intercourse outside of an established romantic relationship (Fincham et al, 2011).

Love-Life

Love-Life is a psychoeducational program developed as a dissertation project by Kira Hoffman at the California School of Professional Psychology. According to the program's creator the goals of the Love-Life program involve "assisting college students in developing a more secure attachment style and becoming involved in happier and healthier romantic relationships" (p. 101). To date, Love-Life is the only relationship education program founded on attachment theory for young adults. A primary aim of the program is to increase participants' understanding of attachment phenomena and to increase their reflective capacity. Unfortunately, however, the Love-Life program has yet to be implemented. The program developer distributed the Love-Life facilitator's manual to 6 college students, 6 Resident Assistants, and 6 college counselors to receive preliminary feedback.

In summary, attachment theory proves a valuable tool for better understanding relationship success and distress. Secure attachment is linked to healthy relationship functioning whereas insecure attachment is a risk factor for relationship problems. Attachment security undoubtedly impacts emerging adults' relationship attitudes and behaviors. Given the transitional nature of emerging adulthood, this population is particularly receptive to a relationship education intervention. Positively impacting

emerging adults' attachment security has the potential to benefit current and future romantic relationships. In spite of the extensive research on attachment theory, few studies explore whether an educational intervention can modify attachment security.

CHAPTER THREE

METHOD

Course Details

The Intimate Relationships course at the University of Montana addresses several facets of close relationships from didactic and experiential perspectives. Course content included the text, *Intimate Relationships, 6th Edition* (Miller, R.S., 2012), as well as a variety of pertinent multimedia materials from current relationship research experts. Additionally, local guest speakers were invited to share about topics including divorce, domestic violence, gender, and sexual identity.

Course objectives as outlined in the syllabus were to: (a) develop an understanding of the empirical and theoretical study of intimate relationships, research methods involved in this field of study, the strengths and limits of this research and accompanying theory, and research findings on intimacy, (b) to gain knowledge and understanding of cultural, biological, and evolutionary perspectives of intimacy, (c) to increase the intrapersonal understanding of factors that inform this view, and how it may be similar to or different from the societal views of the present and/or past, (d) to increase awareness of cultural differences regarding intimate relationships and the implications of these differences on the individual and society.

The course encouraged students to engage in considerable self-reflection. On a regular basis students were asked to reflect on past, current, and future relationships and examine their personal beliefs about relationship matters. Students were examined on three occasions to assess their understanding of course content. Additionally, students

wrote two reflection papers addressing their personal definition of intimacy and the value relationships play in their lives.

A unique aspect of the course involved a lab experience in which students were required to participate in one of the following four options: (1) complete eight 1 hour individual counseling sessions with a supervised graduate student from the Counselor Education Department; (2) complete six, 1.5 hour psycho-education based group counseling sessions facilitated by two supervised graduate students from the Counselor Education Department; (3) complete five reflection papers based on course content; (4) volunteer for and reflect on a community activity related to relationships.

Procedure

A convenience sample was utilized in this study. The experimental group consisted of students in one of four sections of the Intimate Relations class. Two sections of the course were taught by a female instructor and two sections of the course were taught by a male instructor in the Counselor Education Department at the University of Montana. The Intimate Relations course was not manualized, so it is possible that students in distinct sections received slightly different content than one another. The control group was comprised of students enrolled in a course titled, Introduction to Interpersonal Communication, taught by a faculty member from the University of Montana Department of Communication Studies.

Students enrolled in the Intimate Relationships course were offered the option of receiving extra credit points towards their final grade in exchange for participating in this research study. Students were advised that there would be no penalty for opting not to participate, and alternative assignments were offered for extra credit opportunity in these

cases. Each participant completed an informed consent form. In an effort to maintain anonymity, no identifying information was obtained on the assessments. Instead participants were asked to provide a code name that they could remember from pre-test to post-test. Institutional Review Board approval was obtained, and ethical protocols were followed.

At the beginning and end of each semester, students in both the experimental and control group completed a battery of paper and pencil assessments and a demographic questionnaire. The packet of assessments took approximately 30 minutes to complete. Pre-test measures were administered and retained, and compared via code matching with post-test scores. At the time of the post-test, participants in the experimental group were asked to indicate which lab option they participated in.

Participants

This study initially included 356 students. However, 69 participants were not included in the data analysis because they either did not fall into the emerging adult demographic and/or they did not complete both the pre and post assessments. Similar to the whole student body at the University of Montana, the sample is largely homogenous with small ethnic minority populations. With a few minor exceptions, the participant demographics are markedly similar in the experimental and control groups (see Table 1).

Table 1
Student Demographics Between Treatment and Control Groups

	Treatment Group N, % 145, 51%	Control Group N, % 142, 49%
Gender		
Female	94, 59%	91, 64%
Male	65, 41%	51, 36%
Ethnicity		
White	139, 88%	122, 86%
Black	9, 6%	7, 5%
Native American	4, 3%	1, <1%
Hispanic	1, <1%	3, 2%
Asian	2, 1%	7, 5%
Other	3, 2%	2, 1%
Adult Child of Divorce		
Yes	48, 33%	45, 32%
No	97, 67%	97, 68%
Current Relationships		
Single	79, 45%	85, 60%
Dating	64, 37%	40, 28%
Engaged	5, 3%	4, 3%
Married	7, 4%	7, 5%
Cohabiting	14, 8%	4, 3%
Divorced	5, 3%	2, 1%
Sexual Orientation		
Heterosexual	130, 92%	136, 96%
Gay	3, 2%	0, 0%
Lesbian	5, < 3%	4, 2%
Bi-sexual	6, < 4%	2, 1%
Other	1, <1%	0, 0%

Instruments

In order to better understand the impact that participant variables had on the study's outcome, the researchers created a demographic questionnaire (See Appendix A). The demographic survey included questions regarding age of participant, year in school, gender, race and ethnicity, sexual orientation, current romantic relationship status, parental marital status, and age at time of parental divorce (if applicable).

For this study, the Experiences in Close Relationships-Revised (ECR-R; Fraley et al., 2000) measurement was used to measure an adult's attachment process in romantic relationships (see Appendix B). The ECR-R has two subscales: Anxiety and Avoidance. The ECR-R contains a total of 36 items (18 items for each scale) measured on a 7-point Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree with a range of summed scores between 18 and 126. The ECR-R has been examined extensively for both reliability and validity. In a variety of studies, it has been demonstrated to have strong psychometric properties. It was developed through an analysis of previously utilized attachment measures and is based on a selection of items that were found to optimize measurement precision and validity (Fraley et al., 2000). Sibley, Fischer, and Liu (2005) investigated test-retest reliability of the ECR-R with a six-week time lapse. The authors reported that both the anxiety subscales were reliable and stable and that .86 of the variance stable for the two administration times. Sibley et al (2005) also examined reliability using test-retest with a three-week interval with 300 undergraduate participants and found reliability coefficients over .90 for scores on both subscales (anxiety and avoidance) of the ECR-R with their sample.

CHAPTER FOUR

RESULTS

This chapter presents the data analysis and consists of three sections: (a) analysis of demographic variables, (b) pre-and post-test analysis of treatment and control groups, (c) analysis of the effects of treatment lab options. The hypotheses and statistical measures used to evaluate the variables will be reviewed. An alpha level of .05 was used to determine significance for all statistical tests.

*Analysis of Treatment and Control Groups**Hypothesis One A*

Students enrolled in the Intimate Relations class (experimental group) will show a significant decrease in attachment-related anxiety as measured by the ECR-R, as compared to students in the Introduction to Interpersonal Communication (control group).

For anxiety the assumption of homogeneity of variances was violated, as assessed by Levene's Test of Homogeneity of Variance anxiety: ($p=.000$). Therefore, a Welch's ANOVA was run to test hypothesis 1A. There was no significant differences in score changes from pretest to posttest between treatment and control group on measures of anxiety Welch's, $F(1, 230.929) = 3.494, p=.063$.

Hypothesis One B

Students enrolled in the Intimate Relations class (experimental group) will show a significant decrease in attachment-related avoidance as measured by the ECR-R, as compared to students in the Introduction to Interpersonal Communication (control group).

The assumption of homogeneity of variances for avoidance was violated, as assessed by Levene's Test of Homogeneity of Variance ($p=.007$). Therefore, a Welch's ANOVA was run to test hypotheses 1.B. There were no significant differences in score changes from pretest to posttest between treatment and control group on measures of avoidance Welch's, $F(1,252.522) = .784, p=.377$.

Gender and ECR-R Scores

An independent samples t -test was calculated in order to compare the means on pre-test scores on the anxiety and avoidance subscales from the Experience in Close Relationships-Revised (ECR-R) for males and females. There was no significant difference found on anxiety subscales $t(140) = 1.191, p=.236$ for Males ($M=2.72$, $SD=1.01$) and Females ($M=3.19$, $SD=1.13$). There was no significant difference found on avoidance pre-test scores $t(165) = -1.40, p=1.62$ for Males ($M=2.9$, $SD=1.19$) and Females ($M=3.19$, $SD=1.13$).

In order to assess whether or not males' and females' anxiety and avoidance scores changed at different rates a one-way ANOVA was run. Levene's test at the .05 level indicates that the equal variance assumption appears valid: anxiety difference $p=.071$ and avoidance difference $p=.075$. When comparing the level of change between males and females, the data do not provide evidence that the means for the two groups differ significantly. For anxiety difference $F(1,139) = 1.765, p=.186$ for avoidance difference $F(1,138) = .954, p=.330$.

Relationship Status and ECR-R Scores

An independent-samples t -test was conducted to compare pre-test scores from participants who identified as single and participants who identified as being in a serious

relationship on the anxiety and avoidance subscales of the ECR-R. There was a significant difference found on anxiety pre-test scores $t(118)=2.41$ $p=.017$, Single ($M=3.10$, $SD=1.13$) and Serious Relationship ($M=2.62$, $SD=1.01$). Single participants reporting higher ECR-R anxiety scores than those in a serious relationship. The Cohen's d for pre-test scores is .443 suggesting a small to medium effect size. No significant difference was found on the avoidance subscale $t(139)=1.90$, $p=.059$ for participants who identify as Single ($M=3.10$, $SD=1.13$) and those who identify as being in a Serious Relationship ($M=2.9$, $SD=1.2$).

Table 2
Relationship Status Pre-test Scores

Pre-test	Group						95% CI for mean difference	t	df
	Single			Serious					
	M	SD	n	M	SD	n			
Anxiety	3.10	1.13	63	2.62	1.01	57	.084, .865	2.41	118
Avoidance	3.31	1.15	77	2.92	1.23	64	-.015, .779	1.90	139

Because the Levene's test indicated that homogeneity of variances was violated, a Welch's ANOVA was calculated in order to compare the means difference between pre-test and post-tests scores on the ECR-R anxiety and avoidance subscales for participants who identified as single and participants who identified in a serious relationship. There was no significant difference in anxiety change between groups $F(4,12.262)=.427$ $p=.787$. Nor was there a significant change in a avoidance between groups $F(4,12.951)$ $p=.448$.

Biological Parent Relationship Status and ECR-R Scores

An independent samples t -test was also calculated in order to compare the means on anxiety and avoidance pre-test scores for participants whose biological parents' were divorced and for participants whose biological parent's who are still married. No significant difference was found $t(142)=-.585, p=.559$ on the anxiety subscale for participants whose biological parents are divorced ($M= 2.79, SD= 1.05$) and biological parents are married ($M= 2.90, SD= 1.12$). No significant difference was found on the avoidance subscale $t(168)=.774, p=.440$ for biological parents are divorced ($M= 3.17, SD= 1.19$) and biological parents are married ($M= 3.02, SD= 1.14$).

An independent samples t -test was also calculated in order to compare the mean difference between pre-test and post-tests scores on the ECR-R anxiety and avoidance subscales for participants whose biological parents are divorced and for participants whose biological parents are married. No significant differences were found for anxiety differences $t(140) -.671 p=.503$ for biological parents are divorced ($M=-.7033, SD=.858$) and biological parents are married ($M= -.692, SD= .826$). There was no significant difference found for avoidance difference $t(139) =-1.450, p=.149$ for biological parents are divorced ($M=-.349, SD=.924$) and biological parents are married ($M=-.231, SD=.829$).

Ethnicity and ECR-R scores

Due to the unbalanced representation of ethnicity within the sample, the experimental group was collapsed into two clusters: whites ($n=116$) and racial/ethnicity minority (13). In order to proceed with a one-way ANOVA or independent samples t -test it is recommended that a sample have a minimum of six participants (Laerd, 2014). This

was grouping was done in order to have at least six participants in the non-white sample. There was homogeneity of variances for anxiety differences as assessed by Levene's Test ($p = .750$). A one-way ANOVA was run and the results indicated that there was not a significant difference in anxiety change between whites and racial/ethnic minority $F(1,128) = 1.554$ $p = .215$.

After meeting the homogeneity of variances assumption, a one-way ANOVA was performed to assess the effects of ethnicity on avoidance change on the ECR-R. The analysis yielded significant results $F(1,128) = 6.42$ $p = .012$. Eta Squared was calculated at .049 suggesting that approximately 5% of the variance in avoidance difference can be attributed to ethnicity.

Analysis of Treatment Lab Options

Hypothesis Two A:

Participants in the experimental group who participate in a counseling lab activity will show a significant decrease in attachment-related anxiety between pre and post-test as measured by the ECR-R than participants who participate in a non-counseling lab.

There was homogeneity of variances as assessed by the Levene's test. Therefore, an ANOVA was run to analyze whether a statistically significant difference in group means between the various lab options was found. There were no significant differences found in anxiety score between the various lab options, $F(2,140) = .111$, $p = .176$.

Hypothesis Two B:

Participants in the experimental group who participate in a counseling lab activity will show a significant decrease in attachment-related avoidance between pre and post-test as measured by the ECR-R than participants who participate in a non-counseling lab.

There was homogeneity of variances as assessed by the Levene's test. Therefore, an ANOVA was run to analyze the whether a statistically significant difference in group means between the various lab options was found. There was no significant differences found in avoidance score $F(2, 139) = 1.760, p=.176$.

A post hoc one sample t-test was run to see if there was a significant difference in pre-test and post-test scores based on the various lab options. A significant difference was found between pre-test and post-test anxiety scores for participants who engaged in the individual counseling option $t(87) = -2.470, p=.008$. The Cohen's d effect size for anxiety difference is .52 suggesting a medium effect. A significant difference was also found between pre-test and post-test avoidance scores for participants who engaged in the individual counseling option $t(87) = -2.162, p=.017$. The Cohen's d effect size for avoidance difference is .463 suggesting a small to medium effect size.

No significant difference in anxiety or avoidance was found for students who participated in the group counseling option; anxiety: $t(24) = .281, p=.390$, avoidance: $t(24) = -.441, p=.331$. No significant difference in anxiety or avoidance was found for students who did not participate in either individual or group counseling; anxiety: $t(25) = 1.03, p=.156$; avoidance: $t(25) = 1.907, p=.068$.

Table 3
Results for One-sample t-test for Individual Counseling

Outcome	M	SD	N	t	df	Sig
Individual Anxiety	-.358	1.363	88	-2.470	87	.008**
Individual Avoidance	-.255	1.110	88	-2.55	87	.017*

Note: $p<.05^*$ $p<.01^{**}$

CHAPTER FIVE

DISCUSSION

This study examined the effects of an undergraduate intimate relationship course-including a therapy lab component, on participants' attachment related anxiety and avoidance. In the following pages, results associated with the research questions will be examined in more detail. Limitations of the study and factors that may have influenced results will be explored and suggestions for future research will be provided.

Research Question 1:

Does completion of a semester-long intimate relationships course affect students' attachment-related anxiety and attachment-related avoidance?

It was hypothesized that there would be a statistically significant decrease in attachment related anxiety and avoidance for students in the Intimate Relationships course compared with students in the Introduction to Interpersonal Communication class. These hypotheses were not supported. It is worth noting, however, that students in the experimental group did show greater improvement in attachment related anxiety compared to the control group but it did not reach statistical significance ($p = .063$). Students enrolled in the Intimate Relationships course were taught explicitly about attachment theory; specifically, the significance of close emotional bonds that children develop with their caregiver and the implications of those bonds when understanding their behaviors and perceptions in close relationships. It is possible that consistently being exposed to course content centering on intimate relationships and attachment related themes primed participants in the experimental group for more attachment change than participants in the control group.

Research Question 2:

How do demographic variables affect student responses on the Experience in Close Relationships scale (ECR-R)?

This research question explores the relationship between four demographic variables (gender, reported relationship status, parent divorce status, and ethnicity), and the Experience in Close Relationships-Revised (ECR-R) measurement. The effect of the demographic variables on the ECR-R scale will be described sequentially below.

Gender

In the current study, the analysis of gender did not yield any statistically significant findings. The mean avoidance scores for males was ($M=2.90$, $SD=1.19$) and females ($M=3.19$, $SD=1.13$). The mean anxiety score for males was ($M=2.72$, $SD=1.01$) and females ($M=3.19$, $SD=1.13$). Although not statistically significant, it is noteworthy that males in the experimental group had lower mean scores (ie more security) than the females on both anxiety and avoidance dimensions.

The ECR-R norms come from a sample of over 17,000 people that was 73% female and had an average age of 27. For the ECR-R norms, the mean avoidance scores for males is ($M=2.92$, $S.D.=1.13$) and females ($M=2.94$, $SD=1.21$). The mean anxiety score for males is ($M=3.57$, $SD=1.10$) and females ($M=3.56$, $SD=1.13$) (Fraley, 2010). The ECR-R scores for males and females in the experimental group were slightly lower than the ECR-R norms. It is possible that the experimental group scores demonstrated slightly more security than the norms because the sample was drawn exclusively from a college population. College samples are less likely to come from high-risk contexts than

community samples and therefore more likely to have more secure attachment (Del Giudice, 2011).

A recent meta-analysis of over 100 studies, examined gender differences in adult romantic attachment revealed that males were higher in avoidance and lower in anxiety when compared to females (Del Giudice, 2011). Nevertheless, the magnitude of effect size suggested substantial commonalities between males and females. The author highlighted that gender differences occur more readily with insecurely attached people (Del Giudice, 2011).

Reported Relationship Status

Relationship status was found to influence attachment related anxiety scores on the ECR-R. Students who identified as single reported significantly more attachment related anxiety than students who reported being in a serious relationship ($p = .017$). These findings are consistent with results generated in Adamczyk and Bookwala's (2013) study. The authors report that single participants had higher scores on of attachment related anxiety and reported more worry about being rejected or unloved. Adamczyk and Bookwala's (2013) findings also revealed that the higher the participants' anxiety scores were, the higher their chances of being single. Until recently, the majority of research on adult attachment has been on individuals engaged in romantic relationships, with little research on adults who are not partnered (Schachner, Shaver, & Gillath, 2008). It is possible that attachment processes don't merely influence perceptions and behaviors in relationships but also the actual engagement in a romantic relationship (Adamczyk & Bookwala, 2013).

Biological Parents' Marital Status

This study found no significant correlation between biological parents' marital status and attachment related anxiety and avoidance as assessed on the ECR-R. These findings are inconsistent with literature demonstrating associations between parental divorce and adult romantic attachment insecurity (Lopez, Melendez, & Rice 2000, Shaver & Mikulincer, 2004). Some research suggests that adult children of divorced parents endorse a lack of trust in intimate relationships, have lower expectations for marriage, and are twice as likely to get divorced themselves (Amato, 1988; Amato & DeBoer, 2001; King, 2002).

A more recent study, however, revealed that parental divorce does not predict attachment insecurity (Bernstein, Keltner, Laurent, 2013). Furthermore, these authors highlighted other research that found no difference in the general well being of adults from divorced and intact families (Brennan & Shaver, 1993; Hazan & Shaver, 1987). Bernstein et al (2013) emphasize that negative effects of divorce are not inevitable. The authors explain that perceptions of major life events are crucial in influencing long-term adjustment. In other words, if a child is able to make personal sense of the divorce at the time it happens, s/he is less likely to suffer ill effects of it. However, if a child maintains problematic beliefs about his or her parents' divorce into adulthood, it is more likely to impact his or her attachment security and perceptions of romantic relationships (Bernstein et al, 2013).

Ethnicity

This study revealed that ethnicity has a significant impact on avoidance related attachment change ($p = .012$). The results indicated that the white group demonstrated

significantly more improvement in their attachment related avoidance than the racial/ethnic minority group. In fact, the racial/ethnic minority group showed an increase in the attachment related avoidance. It should be noted that very few of the individuals in the ethnic/minority group participated in the individual counseling option.

Although statistical analysis accounted for the large degree of variance in sample size between groups, it seems important to acknowledge the small sample size of the racial/ethnic minority group. The small sample size of the racial/ethnic minority group makes the results more difficult to infer to a larger population. Consequently, further research is necessary. It is also recommended that the Intimate Relations instructors, counselors, and supervisors receive multicultural training prior to the course.

Considering the large body of attachment research, few studies have been conducted comparing attachment across racial or ethnic groups within the United States (Wei, Russel, Mallinckrodt, Zakalik, 2004). Wei et al (2004) conducted a study examining whether the construct of adult attachment was equivalent for college students across four ethnic groups: White, African Americans, Asian American, and Hispanic Americans. Using the ECRS, the results provide empirical data supporting the contention that the construct of adult attachment is equivalent for college students across the four ethnic groups (Wei et al, 2004). The ECR-R has not been empirically tested with African American, Asian, Hispanic, and Native American groups.

Research Question 3:

Will students in the experimental group who participate in a counseling lab option demonstrate greater change in attachment security as measured by the ECR-R than students who chose a non-counseling lab option?

It was hypothesized that students who participated in the individual or group counseling lab option would demonstrate a significant decrease in attachment-related avoidance and anxiety between pre and post-test as measured by the ECR-R compared to participants who engaged in a non-counseling lab. Although the ANOVA analysis did not reveal significant findings, a post-hoc one-sample t-test did. A significant difference was found between pre-test and post-test anxiety scores for participants who engaged in the individual counseling option ($p=.008$). The Cohen's d effect size for anxiety difference is .52 suggesting a medium effect. A significant difference was also found between pre-test and post-test avoidance scores for participants who engaged in the individual counseling option ($p=.017$). The Cohen's d effect size for avoidance difference is .463 suggesting a small to medium effect size.

The integrative approach of relationship education and individual counseling may provide students a unique opportunity to enhance their reflective functioning and subsequent attachment security. Students who engaged in individual counseling had more opportunities than others to delve into attachment related concepts and content. Consequently, it is likely they gained more self-awareness and personal insight about their family dynamics, current feelings, beliefs, and attitudes regarding romantic relationships.

There is an established relationship between reflective functioning and attachment security. Research suggests that to a large extent, one's capacity to understand others is based upon his or her ability to tune into him or herself (Fonagy & Target, 1997). The more an individual develops a capacity to resonate with his or her own experience the better able s/he is able to resonate with someone else's as well (Bateman & Fonagy,

2010). The safety of a supportive therapeutic relationship facilitates clients' ability to think about themselves in relation to others. An individual learns about him or herself by being genuinely understood by someone else (Wallin, 2007). It is possible that students were primed for attachment change as a result of the relationship education. Individual counseling provided participants with the opportunity to enhance their reflective functioning and improve their attachment security.

Another explanation regarding why students who participated in the individual counseling option demonstrated the most change towards greater attachment security is that these students were the most committed to taking advantage of the opportunity for personal growth. One concern the creators of Project RELATE cited was that students may be willing to attend the course, but not take the opportunity for personal growth seriously (Fincham et al 2011). In this current study, it is possible that students who participated in the individual counseling option were more eager to address interpersonal concerns than students who engaged in the group, volunteer, or paper writing process.

Other possible explanations include a positive working alliance between the counselor and the client. As Bowlby (1988) emphasizes, clients are more readily able to make adaptive changes within the safe have of a secure therapeutic relationship. Moreover, theories such as cognitive dissonance and self-perception theory may also be possible explanations for the attachment change.

To date there are no other known studies addressing changes in individuals' attachment security through a combination of relationship education and brief therapy. Travis, Binder, Bliwise, and Horne-Moyer (2001) conducted a study examining changes in client's attachment security over the course of time-limited dynamic psychotherapy.

The authors reported that post-treatment findings indicated that a significant number of clients were evaluated as having changed from an insecure to a secure attachment style. Additionally, the sample as a whole demonstrated significant changes towards increased attachment security.

Limitations

This study contained a number of limitations. The sample enrolled in the Intimate Relations course was a self-selected group. The group consisted of young, primarily white, and educated individuals. Consequently, the results of this investigation are not as generalizable as a randomly selected and more heterogeneous group would be.

Another limitation is the exclusive use of self-report measures. Though the attachment measure in this study (ECR-R) has been studied extensively and is considered to have strong psychometric properties, this measure also has its limitations. For instance, self-report measures are susceptible to social desirability bias. More specifically, it is possible that self-reports tend to inflate security as individuals' (primarily unconscious) defenses cause them to underreport insecurity and inflate security.

The similar course content between the control (an undergraduate Communication course) and treatment (an undergraduate Intimate Relationships course) presents two possible limitations. Since both courses are rooted in the humanities, it is possible that both courses may attract students who have similar values and belief systems, therefore reducing the likelihood of seeing variance in pre-test survey responses. Moreover, there is inherent overlap in course content; communication is a core concept in the Intimate Relationships course and the Interpersonal Communication course is taught within the context of relationships. It is likely that more post-test change between groups might

have been demonstrated in a study with a control group that has markedly distinct course content than the treatment group.

Implications

Despite these limitations, empirical findings from this study have implications for relationship education and adult attachment research. The results from this study support a significant association between attachment change and the combination of relationship education and individual therapy. Such information may help researchers design and implement interventions that further target attachment processes.

Although the concepts of attachment theory are often included in relationship education, rarely are they explicitly addressed. Given the extensive literature on the various ways one's attachment security affects his or her perceptions and behaviors in romantic relationships, it would be helpful to further elucidate attachment concepts for relationship education participants. The more aware participants are of attachment concepts, the better equipped they will be to identify and adeptly address attachment themes in their personal lives.

In order for relationship education to be truly meaningful, course content needs to feel applicable to participants' everyday lives. All too often, participants enhance their knowledge of relationship concepts such as attachment, but do not have ample opportunity to translate this awareness into behavior change. It seems imperative that relationship educators further develop and expand the experiential components of course content. For instance, it may be beneficial to provide students with additional in-class opportunities to engage in small group discussions and role-plays. This type of hands-on-learning allows students to more fully engage in the learning process and try on new

skills and behaviors before trying to implement them outside of the classroom. Ideally, though these experiences, students will feel empowered to respond to challenging interpersonal situations in more flexible and intentional ways.

Furthermore, this research has specific implications for counselor education. For instance it demonstrates the value for counselors and counselor educators to have expertise in the field of attachment. It would be beneficial for counseling students to take a specific course in attachment, emphasizing how the therapeutic relationship has the ability to affect attachment. The positive impact that blended learning, when learned through both didactic and experiential components should also be taken into consideration when developing counselor education courses.

Future Research

As with most research, answers to one study often present additional questions to guide future studies. Given the findings and limitations of the current study, a number of opportunities for future research emerge. First, expanding methodologies and research designs could extend the current study in a number of ways. Adding a qualitative component to the current study could provide a deeper and more comprehensive exploration of participants' perceptions of how the course and counseling options impacted their attachment security. For instance, it would be interesting to repeat this study using both self-report measures of attachment and attachment narratives such as the Adult Attachment Interview (AAI). Similarly, it would be helpful to add greater depth to this study by adding additional measures such as a loneliness scale or relationship coping tool.

Another way to extend the current line of research would be to include a longitudinal component addressing whether changes in attachment are maintained over time. For instance, it would be interesting to administer the ECR-R at six-week intervals throughout the academic year. It is possible that after treatment gains deteriorate relatively quickly. In contrast, it is likely that shifts in individuals' internal working models allow them to improve their relationships with close others and attachment security gain increase.

Another interesting future study may involve further examining the disparate ways that relationship education impacts single individuals as compared to those involved in intimate relationships. For instance, does relationship education impact single participants' mate selection? Does it show to be even more effective with single participants than coupled partners because it helps them to address attachment concerns before they are negatively impacting a romantic relationship?

Given that the counseling component of this relationship education course is critical, it would be worthwhile to further investigate it in more detail. For instance, it would be interesting to better understand whether various therapeutic approaches differentially impact attachment change. Similarly, it would be worthwhile to better understand why the group counseling intervention did not yield as positive attachment related results as the individual counseling.

Conclusion

Relationship education is an expanding field and is now targeted at a more diverse group of participants than ever before. There is a clear need to provide single and coupled emerging adults with pertinent and sound relationship education. The ability to

form close romantic relationships has been cited as one of the fundamental developmental tasks of emerging adulthood (Erikson, 1959). Consequently, a better understanding of attachment and how it impacts one's beliefs about self and others, interpersonal dynamics, and relationship satisfaction is wholly beneficial to emerging adults. A vital and under-investigated aspect of relationship education centers on attachment theory and its implications for adult romantic relationships. This investigation begins to fill that gap.

Bowlby (1979) believed that internal working models function automatically at an unconscious level and are resistant to change. He later suggested, however, that significant experiences with close others over the lifespan can alter core beliefs about self and others. This study along with several other modern investigations has demonstrated that adult attachment can indeed be changed. In fact, there are likely a myriad of interventions that facilitate attachment change. This investigation demonstrated that the combination of relationship education and individual therapy appears to be more powerful than perhaps each intervention would be in isolation.

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Appendix A: Demographic Questionnaire

Name of 1st Pet: _____ Last 4 Telephone numbers: _____

COUN 242 Class Pretest on Intimate Relationships Knowledge and Attitudes

Please respond to the following questions either by writing in your response or circling the option that best fits your response.

1. What is your age? _____

2. What is your gender? _____

3. What year are you in college?

Freshman Sophomore Junior Senior Other _____

4. What do you identify as your sexual orientation?

Heterosexual Homosexual Bisexual Other _____

5. What is your ethnicity?

White _____ Hispanic _____

African American _____ Asian _____

Native American _____ Other (please identify) _____

6. Were your biological parents divorced when you were under the age of 18? **If no, please skip questions 7-9 and proceed to item #10.**

Yes No

7. What was your age when your parents were divorced? _____

8. Did you live with one biological parent? Yes No

If "Yes," which parent did you live with after the divorce? _____

9. Did either of your parents remarry after their divorce? Yes No

10. What is the current relationship or marital status of each of your biological parents?

Mother: Married Cohabiting Divorced Widowed Separated Unknown

Father: Married Cohabiting Divorced Widowed Separated Unknown

11. What is your current relationship or marital status?

Single Seriously Dating Engaged Married Cohabiting Divorced Widowed
Separated

Appendix B:
Experiences in Close Relationships Revised Questionnaire

ECR-R

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with the statement.

1. I'm afraid that I will lose my partner's love.
strongly disagree 1 2 3 4 5 6 7 strongly agree
2. I often worry that my partner will not want to stay with me.
strongly disagree 1 2 3 4 5 6 7 strongly agree
3. I often worry that my partner doesn't really love me.
strongly disagree 1 2 3 4 5 6 7 strongly agree
4. I worry that romantic partners won't care about me as much as I care about them.
strongly disagree 1 2 3 4 5 6 7 strongly agree
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
strongly disagree 1 2 3 4 5 6 7 strongly agree
6. I worry a lot about my relationships.
strongly disagree 1 2 3 4 5 6 7 strongly agree
7. When my partner is out of sight, I worry that he or she might become interested in someone else.
strongly disagree 1 2 3 4 5 6 7 strongly agree
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
strongly disagree 1 2 3 4 5 6 7 strongly agree
9. I rarely worry about my partner leaving me.
strongly disagree 1 2 3 4 5 6 7 strongly agree
10. My romantic partner makes me doubt myself.
strongly disagree 1 2 3 4 5 6 7 strongly agree
11. I do not often worry about being abandoned.
strongly disagree 1 2 3 4 5 6 7 strongly agree

12. I find that my partner(s) don't want to get as close as I would like.
strongly disagree 1 2 3 4 5 6 7 strongly agree

13. Sometimes romantic partners change their feelings about me for no apparent reason.
strongly disagree 1 2 3 4 5 6 7 strongly agree

14. My desire to be very close sometimes scares people away.
strongly disagree 1 2 3 4 5 6 7 strongly agree

15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
strongly disagree 1 2 3 4 5 6 7 strongly agree

16. It makes me mad that I don't get the affection and support I need from my partner.
strongly disagree 1 2 3 4 5 6 7 strongly agree

17. I worry that I won't measure up to other people.
strongly disagree 1 2 3 4 5 6 7 strongly agree

18. My partner only seems to notice me when I'm angry.
strongly disagree 1 2 3 4 5 6 7 strongly agree

19. I prefer not to show a partner how I feel deep down.
strongly disagree 1 2 3 4 5 6 7 strongly agree

20. I feel comfortable sharing my private thoughts and feelings with my partner.
strongly disagree 1 2 3 4 5 6 7 strongly agree

21. I find it difficult to allow myself to depend on romantic partners.
strongly disagree 1 2 3 4 5 6 7 strongly agree

22. I am very comfortable being close to romantic partners.
strongly disagree 1 2 3 4 5 6 7 strongly agree

23. I don't feel comfortable opening up to romantic partners.
strongly disagree 1 2 3 4 5 6 7 strongly agree

24. I prefer not to be too close to romantic partners.
strongly disagree 1 2 3 4 5 6 7 strongly agree

25. I get uncomfortable when a romantic partner wants to be very close.
strongly disagree 1 2 3 4 5 6 7 strongly agree

26. I find it relatively easy to get close to my partner.
strongly disagree 1 2 3 4 5 6 7 strongly agree

27. It's not difficult for me to get close to my partner.
strongly disagree 1 2 3 4 5 6 7 strongly agree

28. I usually discuss my problems and concerns with my partner.
strongly disagree 1 2 3 4 5 6 7 strongly agree

29. It helps to turn to my romantic partner in times of need.
strongly disagree 1 2 3 4 5 6 7 strongly agree

30. I tell my partner just about everything.
strongly disagree 1 2 3 4 5 6 7 strongly agree

31. I talk things over with my partner.
strongly disagree 1 2 3 4 5 6 7 strongly agree

32. I am nervous when partners get too close to me.
strongly disagree 1 2 3 4 5 6 7 strongly agree

33. I feel comfortable depending on romantic partners.
strongly disagree 1 2 3 4 5 6 7 strongly agree

34. I find it easy to depend on romantic partners.
strongly disagree 1 2 3 4 5 6 7 strongly agree

35. It's easy for me to be affectionate with my partner.
strongly disagree 1 2 3 4 5 6 7 strongly agree

36. My partner really understands me and my needs.
strongly disagree 1 2 3 4 5 6 7 strongly agree